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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/703,869 | 11/02/2000 | Masafumi Baba | 001461 | 2292 |

38834 7590 07/11/2006

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| ART UNIT | PAPER NUMBER |
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2625

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (US 6,213,652).

Regarding claim 1: Suzuki teaches a processor (fig. 27, column 41, lines 45-50, print processing device) comprising: a print data storing unit (the spool that holds document data in a received job, column 41, lines 65-67) storing the print data of an accepted print job, and a spool file storing unit (the printer queues, of column 44, lines 37-40, 214 of fig. 29) storing said print data read out from said storing unit, a processing units (the units in the processing device excluding job execution section, column 41, lines 45-50) for registering a print request command (attributes of a print job, column 44, lines 60-68, column 45, lines 1-15; e.g., the after complete processing or before complete processing, column 43, line 60) of an accepted print job (column 41, line 55, column 45, lines 27-31), storing print data (documents data of a print job, column 41, lines 65-67, fig. 30a-c, column 45, lines 27-31) of the print job in said print data storing

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unit (spool, column 41, line 66, column 45, lines 1-5; also see column 41, lines 55-60, job acceptance section unifies various type of format of the received print job and passes the unified format print job to the job control section, since the unifying process takes time, the (job control section) must have (inherent) a storage for storing the print job to prevent the print job from being lost during the unifying process), reading out (storing document data from the job acceptance section 201, column 41, lines 55, to the printer queue 260, column 44, lines 37-50, also see 214, fig. 28) the print data (a print job inherently consists of print data) from said print data storing unit in accordance with the print request command and writing the print data to said spool file storing unit (the area of the printer queue 260, column 44, lines 37-50 that stores document data); a device control filter (converter, column 42, lines 19-30) for analyzing and processing (converts a print format, column 42, lines 18-21, for example converting print job data into PDL, converting a print format of the job requires analyzing and processing the print data of the job) the print data sequentially read out from the spool file storing unit, (queuing document in printer queue S11, fig. 31 before being processed by the printer, a queue is a FIFO type of memory, inherent properties of a queue) by the processing unit, and outputting said print data so analyzed and processed to a printer, (printer, column 42, line 20-25), wherein the processing unit starts writing the print data read out from said print data storing unit to the spool file storing unit in accordance with the print request command (column 46, lines 1-10, fig. 31, column 4, lines 15-20), before said processing unit finishes storing said print data in said print data storing unit (column 44, lines 2-30).

Regarding claim 2: Suzuki teaches wherein the processing unit informs the device control filter (the print request received by the job execution section, column 42, lines 10-22) that the storing of the print data of the print job has been completed (e.g., column 44, lines 50-55), and wherein said device control filter analyzes and processes said print data that has been stored in and read out from the print data storing unit to the end of the print data (see discussion of claim 1)

Regarding claim 3: Suzuki teaches wherein the processing unit can accept and register a plurality of print jobs, (jobs, column 41, line 57) and wherein the device control filter can analyze and process print data processing (converts a print format, column 42, lines 18-21, for example converting print job data into PDL, converting a print format of the job requires analyzing and processing the print data of the job) of respective print jobs (each job is having a file (collection of data) for storing the respective print job documents, column 44, lines 40-50, column 45, lines 27-31) read out in accordance with the print request command (e.g., the after complete processing command, S4, fig. 31) for output to a plurality of different printers (column 43, lines 22-35, column 44, lines 38-40).

Regarding claim 4: Suzuki teaches a processor (fig. 27, column 41, lines 45-50, print processing device) comprising: a print data storing unit (the spool that holds document data in a received job, column 41, lines 65-67) storing the print data of an accepted print job, and a spool file storing unit (the printer queues, of column 44, lines 37-40, 214 of fig. 29) storing said print data read out from said storing unit, a processing units (the units in the processing device excluding job execution section, column 41,

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lines 45-50) for storing print data of a plurality of accepted print job (jobs, column 41, lines 55-67, column 45, lines 27-31) in a print data storing unit (e.g., spool, column 41, line 66, column 45, lines 1-5; also see column 41, lines 55-60, job acceptance section unifies various type of format of the received print job and passes the unified format print job to the job control section, since the unifying process takes time, the (job control section) must have (inherent) a storage for storing the print job to prevent the print job from being lost during the unifying process; also see hold queue, column 16, lines 47-55), reading out (storing document data from the job acceptance section 201, column 41, lines 55, to the printer queue 260, column 44, lines 37-50, also see 214, fig. 28) sequentially a print data of (print document of a print jobs fig. 30a-c, fig. 29, column 46, lines 1-7, column 26, lines 50-55) each print job from said print data storing unit and writing the print data to said spool file storing unit (the area of the printer queue 260, column 44, lines 37-50 that stores document data); a device control filter (job execution section, converter, column 42, lines 19-30, processing section of column 44, lines 30-35) for reading out the print data from the spool file storing unit, analyzing and processing (converts a print format, column 42, lines 18-21, for example converting print job data into PDL, converting a print format of the job requires analyzing and processing the print data of the job) the print data read out from the spool file storing unit, and outputting the print data to a printer, (printer, column 42, line 20-25), wherein the device control filter is not analyzing and processing the print data, (the print data (e.g., print job data of print job 1, fig. 29) that is not being send out of the queue when the print data is being stored in the queue S5, fig. 31), said processing unit reads out the print data (e.g.,

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print job data of print job 1, fig. 29) of each of the print job in accordance with a specific condition (column 44, lines 37-57, column 43, lines 55, column 44, lines 30-35, fig. 29) which determines an output sequence of the registered print jobs (column 41, lines 55-65, stored and identified print job such that the print job would be able to be retrieved) stored in the print data storing unit, and writes the read out data to the spool file storing unit (printer queue, fig. 31), and the specific condition is set by a user (the user that program the print job to be, e.g., after-completion processing etc, column 44, lines 49-50).

Regarding claim 5: Suzuki teaches wherein said processing units starts writing said print data of the print job to the spool file storing unit in accordance with a print request command (column 42, lines 10-30), before the processing unit finishes storing of the print data in the print data storing unit.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 6,213,652).

Regarding claim 6: Suzuki, in embodiment 4 does not teach teaches wherein the processing unit can read out print data of the print job from the print data storing unit for

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supply to device control filter only when a requester of printing releases the print job from a hold condition in a case wherein the print job is accepted in the hold condition.

However, Suzuki, in column 26, lines 45-55, teaches wherein the processing unit can read out print data of the print job from a storing unit (hold queue) for supply to device control filter only when a requester (user) of printing releases the print job from a hold condition in a case wherein the print job is accepted in the hold condition.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Suzuki's embodiment 4 to include: wherein the processing unit can read out print data of the print job from the print data storing unit for supply to device control filter only when a requester of printing releases the print job from a hold condition in a case wherein the print job is accepted in the hold condition.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Suzuki's embodiment 4 because (a) it would have allowed a user to control when to process the print job and (b) allowing a user to control the print job would prevent the system of printing when there is an obvious error in the judgment of the user.

Response to Arguments

5. Applicant's arguments filed on 4/26/2006 have been fully considered but they are not persuasive.

With respect to applicant's argument that that Suzuki does not disclosed a print data storing unit storing print data and a spool file storing unit storing the print data read out from the print data storing unit because: 1) the document is store in the spool of the job acceptance unit and 2) a printer queue of Suzuki is not a spool file because Suzuki's print queue does not store document data, has been considered.

In reply: According the Microsoft Press Computer Dictionary, Third Edition: a print queue is a buffer for document and images waiting to be printed; a print spooler is a computer software that intercepts a print job on its way to the printer and send it to a disk or memory instead; a spool is used to store a document in a queue; and a document is any user created work named and saved as a separate file.

Column 42, lines 45-50, Suzuki states when the job execution section which is a printer (could also be a converter, column 42, lines -20) fetches document data of a print document from the spool of the job acceptance section, it does not states that the document data is directly going from the job acceptance section to the printer. For example, the print data would have been intercepted by a print spooler and stored in a queue before the print data is being sent to the printer. Therefore, applicant's conclusion that the document block of column 44, lines 41-46 is a filename is incorrect.

Column 44, lines 65-67, column 45, lines 1-5, clearly teaches the document data item 280b is stored in the spool of the job acceptance section 201, which is represented by DOC1, DOC2...DOCn of fig. 30C and fig. 30a. The attribute data item 280b is represented as DOC1 attribute...DOCn attribute. Fig. 29 Suzuki clearly teaches the

queue is storing DOC1, DOC2...DOCn; not DOC1 attribute. Therefore, Suzuki teaches to store document data item in the queue.

Furthermore, fig. 26-28, column 43, lines 55-67, column 44, lines 3-10, column 45, lines 50-60, clearly showing that the scheduling section 212 is queuing the received document from the client to a queue, not just a file name or a waiting list with no document data. Column 41, lines 55-67, teaches the documents are first accepted through job acceptance unit.

With respect to applicant's argument that since the unifying process takes place in the job acceptance section 201, the job control section does not inherently have storage for storing the print job for preventing job from being lost during unifying process, has been considered.

In reply: The examiner maintained that since the unifying process takes time, there must be (inherent) a storage for storing the print job to prevent the print job from being lost during the unifying process. Applicant points out that the unifying process is located in the job acceptance section.

Furthermore, column 42, lines 10-15, teaches the job control section received a print processing job from the job acceptance section and analyses the contents of the job.

Conclusion, the document data of Suzuki must be stored in the job acceptance section of the processor 27 before being queued into a queue.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 2, 2006


KING Y. POON
PRIMARY EXAMINER